

RF AMPLIFIER

MODEL *TM9704*

Available as: TM9704, 4 Pin TO-8 (T4)
 TN9704, 4 Pin Surface Mount (SM3)
 FP9704, 4 Pin Flatpack (FP4)
 BX9704, Connectorized Housing (H1)

Features

- High Gain: 18.0 dB
- Low Noise Figure: 3.3 dB
- Operating Temp. -55°C to +85°C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency (MHz)	50 -2600 MHz	100 -2500 MHz
Gain (dB)	18.0	17.0 Min.
Power @ 1 dB Comp. (dBm)	+18	+17 Min.
Reverse Isolation (dB)	-36	---
VSWR In	1.75:1	2.0:1 Max.
Out	1.50:1	2.0:1 Max.
Noise Figure (dB) 200-2500 MHz	3.3	4.5 Max.
Power Vdc mA	+15 80	+15 93 Max.

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point..... +48 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+42 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +28 dBm (Typ.)

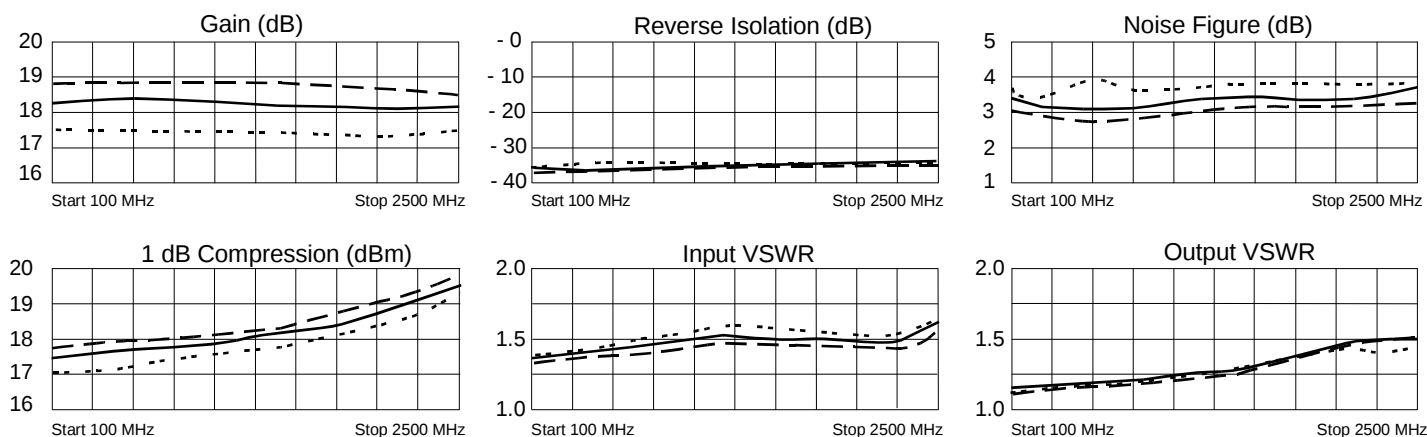
Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 17 Volts
 Continuous RF Input Power + 17 dBm
 Short Term RF Input Power ... 100 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.

Revision 11/4/2014

Typical Performance Data



Legend ——— + 25 °C - - - - + 85 °C -55 °C

Linear S-Parameters

FREQ. MHz	---S11--- Mag Deg	---S21--- Mag Deg	---S12--- Mag Deg	---S22--- Mag Deg
100	.17 -2	8.33 -10	.0136 -0	.08 1
300	.17 -1	8.32 -12	.0161 -6	.08 0
500	.17 -2	8.36 -13	.0167 2	.08 1
700	.17 -2	8.35 -15	.0152 -7	.08 -2
900	.18 -2	8.33 -16	.0155 -9	.08 -2
1100	.18 -3	8.33 -18	.0146 -7	.08 -2
1300	.18 -2	8.34 -20	.0150 -13	.08 -4
1500	.18 -3	8.35 -21	.0132 -6	.08 -6
1700	.18 -3	8.33 -22	.0140 -3	.08 -5
1900	.18 -4	8.33 -24	.0127 -5	.08 -6
2100	.18 -4	8.33 -25	.0159 -4	.08 -6
2300	.18 -4	8.32 -27	.0133 -12	.08 -6
2500	.18 -5	8.32 -28	.0143 -13	.08 -8



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